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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,804	07/10/2001	Michael Robert Smialek	086328-9004	7915
1131	7590	04/22/2004	EXAMINER	
MICHAEL BEST & FRIEDRICH LLC 401 NORTH MICHIGAN AVENUE SUITE 1700 CHICAGO, IL 60611-4212			LE, UYEN T	
			ART UNIT	PAPER NUMBER
			2171	14

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/901,804

Applicant(s)

SMIALEK, MICHAEL ROBERT

Examiner

Uyen T. Le

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Due to newly found prior art, the allowability of claims 2-15 indicated on the previous Office Action is withdrawn. Consequently, this Action is made non-final.
2. Applicant's substitute specification and drawings to correct duplicate reference numerals are acknowledged.

### ***Claim Objections***

3. Claims 8, 13 are objected to under 37 CFR 1.75 as being duplicates of claims 7, 12 respectively. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Rumbaugh et al "Object-oriented modeling and design", Prentice Hall, 1991, chapter 4, pages 57-80.

Regarding claim 2, Rumbaugh discloses all the claimed subject matter including all representation means (see Figure 4.2-4.26, pages 59-80). The claimed plurality of classes of objects reads on the classes of vehicle, land vehicle, water vehicle, car, amphibious vehicle, boat. The claimed plurality of default class behavior categories reads on the fact that car is the default class for land vehicle and boat is the default class for water vehicle. The claimed plurality of members of classes of object is met by

land vehicle and water vehicle, which are members of vehicle. The claimed plurality of default member behavior categories is met by the car and boat. The claimed relationships between classes of object are shown by the tree of Figure 4.8.

Furthermore, classes can also be considered as objects (see page 71), therefore, Figure 4.8 clearly represents relationships between objects. The claimed modeling data formations and validation constraints are met when Rumbaugh shows modeling and design constraints (see pages 73-76).

Regarding claim 3, Rumbaugh discloses means for representing a plurality of optional additional class behaviors for a plurality of class behavior categories (see Figure 4.17).

Regarding claim 4, Rumbaugh discloses means for representing a plurality of optional additional member behavior for a plurality of member behavior categories (see page 63).

Regarding claim 5, Rumbaugh discloses means for representing a plurality of links between relationships between classes of objects (see page 65 multiple inheritance).

Regarding claims 6, 7, Rumbaugh discloses means for representing a plurality of composite relationships composed of a plurality of links between a plurality of relationships between classed of objects (see pages 65-69).

Regarding claim 8, Rumbaugh discloses means for representing direction of relation links (see Figure 4.8).

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Regarding claim 9, Rumbaugh discloses means for representing a plurality of default relationship behavior categories (see Figure 4.16).

Regarding claim 10, the claimed means are used to store instantiations of elements of the universal meta model, thus are met by the CAD programs, C++ compiler shown in Rumbaugh (see Figure 4.18).

Regarding claim 11, the claimed tree views and tree levels are met by Figures shown at pages 59-68.

Regarding claims 12, 13, Rumbaugh discloses means for storing data instantiations of said universal meta model elements and meta model values (see Figure 4.14).

Regarding claim 14, Rumbaugh discloses means for displaying a graphical representation of data, means for displaying textual representing of data and means for displaying tabular representation of data when Rumbaugh shows the CAD programs (see Figure 4.18).

Claim 15 merely differs from claim 14 by reciting "data formations" instead of "data". Since the editor disclosed by Rumbaugh is used in modeling and design, clearly data include "data formations" as claimed.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Herbig et al (US 5,745,675) teach object-oriented framework mechanism for performing computer system diagnostics.

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Deffler et al (US 6,601,023) teach method for impact analysis of a model.

Gerken, III (US 6,601,072) teach method and system for distribution of application data to distributed databases of dissimilar formats.

Chailloux et al "LxLisp, a portable and efficient Lisp system", ACM 1984, pages 113-122.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T. Le whose telephone number is 703-305-4134. The examiner can normally be reached on M-F 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



16 April 2004

UYEN LE  
PRIMARY EXAMINER